

DECLARATION

INVENTORSHIP IDENTIFICATION

As a below named inventor, I hereby declare that my residence, post office address and citizenship are as stated below, next to my name. I believe that I am the original, first and sole inventor (*if only one name is listed below*) or an original, first and joint inventor (*if plural names are listed below*) of the subject matter that is claimed, and for which a patent is sought on the invention entitled:

COMPUTER-AIDED BONE DISTRACTION

TITLE OF INVENTION

SPECIFICATION IDENTIFICATION

the specification of which:

- (a) is attached hereto.
- (b) was filed on April 7, 2000, as Serial No. 09/545,685
 and was amended on (if applicable).
- (c) was described and claimed in PCT International Application No. filed on
 and was amended on (if applicable).

ACKNOWLEDGMENT OF REVIEW OF PAPERS AND DUTY OF CANDOR

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims as amended by any amendment referred to above.

I acknowledge the duty to disclose information, which is material to patentability as defined in 37, Code of Federal Regulations, § 1.56.

PRIORITY CLAIMS UNDER 35 U.S.C. § 119(a)-(d) (Prior Foreign/Pct Application(S) Filed Within 12 Months (6 Months For Design) Prior To This Application)

I hereby claim foreign priority benefits under Title 35, United States Code, § 119(a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate(s) or 365(a) of any PCT international application(s) which designated at least one country other than the United States of America, listed below and have also identified below any foreign application(s) for patent or inventor's certificate(s) or any PCT international application(s) having a filing date before that of the application(s) of which priority is claimed.

Application Number	Country or PCT	Date Of Filing (Day, Month, Year)	Priority not Claimed	Certified Copy Attached?
			<input type="checkbox"/>	<input type="checkbox"/> YESNO <input type="checkbox"/>

CLAIM FOR BENEFIT OF PRIOR U.S. PROVISIONAL APPLICATION(S) UNDER 35 U.S.C. § 119(e)

I hereby claim the benefit under Title 35, United States Code, § 119(e) of any United States provisional application(s) listed below:

Provisional Application Number	Filing Date

CLAIM FOR BENEFIT OF EARLIER US/PCT APPLICATION(S) UNDER 35 U.S.C. 120

(All Foreign Application(S), If Any, Filed More Than 12 Months
(6 Months For Design) Prior To This U.S. Application)

I hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s) or 365(c) PCT international application(s) designating the United States of America that is/are listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT international application(s) in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose information which is material to patentability as defined in 37, Code of Federal Regulations, § 1.56, which became available between the filing date of the prior application(s) and the national or PCT international filing date of this application.

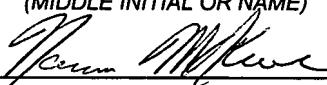
U.S Parent Application No.	PCT Parent Application No.	Date Of Filing (Day, Month, Year)	Parent Patent No. (If applicable)

DECLARATION

I hereby declare that my presentation of this paper constitutes a certification under 37 C.F.R § 10.18, which provides, in part, that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and that further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful statements may jeopardize the validity of the application and any patent issuing therefrom.

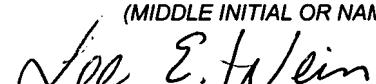
SIGNATURE(S)

Inventor(s)

Norman	(GIVEN NAME)	(MIDDLE INITIAL OR NAME)	Krause	FAMILY (OR LAST NAME)
<u>Inventor's signature</u>				
Date	<u>9/28/00</u>		Country of Citizenship	<u>USA</u>
Residence	<u>Pittsburgh, PA 15217</u>			
Post Office Address	<u>5544 Northumberland Street, Pittsburgh, PA 15217</u>			

Robert	(GIVEN NAME)	W.	(MIDDLE INITIAL OR NAME)	Mendicino	FAMILY (OR LAST NAME)
<u>Inventor's signature</u>					
Date	<u>9/20/00</u>		Country of Citizenship	<u>USA</u>	
Residence	<u>Pittsburgh, PA 15224</u>				
Post Office Address:	<u>4800 Friendship Avenue, North Tower, First Floor, Pittsburgh, PA 15224</u>				

Kenji	(GIVEN NAME)	(MIDDLE INITIAL OR NAME)	Shimada	FAMILY (OR LAST NAME)	
<u>Inventor's signature</u>					
Date	<u>Sept 18, 2000</u>		Country of Citizenship	<u>Japan</u>	
Residence	<u>Pittsburgh, PA 15237</u>				
Post Office Address:	<u>1704 La Costa Court, Pittsburgh, PA 15237</u>				

Lee	(GIVEN NAME)	(MIDDLE INITIAL OR NAME)	Weiss	FAMILY (OR LAST NAME)	
<u>Inventor's signature</u>					
Date	<u>9/18/00</u>		Country of Citizenship	<u>USA</u>	
Residence	<u>Pittsburgh, PA 15217</u>				
Post Office Address:	<u>6558 Darlington Road, Pittsburgh, PA 15217</u>				

Takeo
(GIVEN NAME) _____

Kanade
(MIDDLE INITIAL OR NAME) _____

Kanade
FAMILY (OR LAST NAME) _____

Inventor's signature: Kanade

Date: Sept 14, 2000 Country of Citizenship: Japan

Residence: Pittsburgh, PA 15208

Post Office Address: 130 Penrose Drive, Pittsburgh, PA 15208

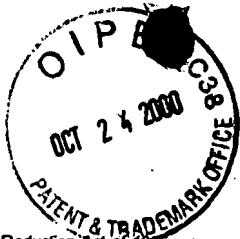
Signature by administrator(trix), or legal representative for deceased or incapacitated inventor. *Number of pages added* _____.

Signature for inventor who refuses to sign or cannot be reached by person authorized under 37 CFR 1.47. *Number of pages added* _____.

Added page for **signature** by one joint inventor on behalf of deceased inventor(s) where legal representative cannot be appointed in time. (37 CFR 1.47) *Number of pages added* _____.

Authorization of attorney(s) to accept and follow instructions from representative.

This declaration ends with this page.



#3

PTO/SB/09 (12-97)

Approved for use through 9/30/00. OMB 0651-0031
Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**STATEMENT CLAIMING SMALL ENTITY STATUS
(37 CFR 1.9(f) & 1.27(b))—INDEPENDENT INVENTOR**Docket Number (Optional)
00113Applicant, Patentee, or Identifier: Krause et al.Application or Patent No.: 09/545,685Filed or Issued: April 7, 2000Title: COMPUTER-AIDED BONE DISTRACTION

As a below named inventor, I hereby state that I qualify as an independent inventor as defined in 37 CFR 1.9(c) for purposes of paying reduced fees to the Patent and Trademark Office described in:

the specification filed herewith with title as listed above.
 the application identified above.
 the patent identified above.

I have not assigned, granted, conveyed, or licensed, and am under no obligation under contract or law to assign, grant, convey, or license, any rights in the invention to any person who would not qualify as an independent inventor under 37 CFR 1.9(c) if that person had made the invention, or to any concern which would not qualify as a small business concern under 37 CFR 1.9(d) or a nonprofit organization under 37 CFR 1.9(e).

Each person, concern, or organization to which I have assigned, granted, conveyed, or licensed or am under an obligation under contract or law to assign, grant, convey, or license any rights in the invention is listed below:

No such person, concern, or organization exists.
 Each such person, concern, or organization is listed below.

Separate statements are required from each named person, concern, or organization having rights to the invention stating their status as small entities. (37 CFR 1.27)

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b))

Norman Krause

NAME OF INVENTOR

Signature of inventor

10/20/00

Date

Robert Mendicino

NAME OF INVENTOR

Signature of inventor

10/23/00

Date

NAME OF INVENTOR

Signature of inventor

Date



66-032

X 3

PTO/SB/11 (12-97)

Approved for use through 9/30/00, OMB 0651-0031
Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, persons are required to respond to a collection of information unless it displays a valid OMB control number.

**STATEMENT CLAIMING SMALL ENTITY STATUS
(37 CFR 1.9(f) & 1.27(d))—NONPROFIT ORGANIZATION**
Docket Number (Optional)
00113Applicant, Patentee, or Identifier: Krause et al.Application or Patent No.: 09/545,685Filed or Issued: April 7, 2000Title: COMPUTER-AIDED BONE DISTRACTION

I hereby state that I am an official empowered to act on behalf of the nonprofit organization identified below:

NAME OF NONPROFIT ORGANIZATION Carnegie Mellon UniversityADDRESS OF NONPROFIT ORGANIZATION 5000 Forbes Avenue
Pittsburgh, PA 15213

TYPE OF NONPROFIT ORGANIZATION:

UNIVERSITY OR OTHER INSTITUTION OF HIGHER EDUCATION

TAX EXEMPT UNDER INTERNAL REVENUE SERVICE CODE (26 U.S.C. 501(a) and 501(c)(3))

NONPROFIT SCIENTIFIC OR EDUCATIONAL UNDER STATUTE OF STATE OF THE UNITED STATES OF AMERICA
(NAME OF STATE _____)
(CITATION OF STATUTE _____)

WOULD QUALIFY AS TAX EXEMPT UNDER INTERNAL REVENUE SERVICE CODE (26 U.S.C. 501(a) and 501(c)(3))
IF LOCATED IN THE UNITED STATES OF AMERICA

WOULD QUALIFY AS NONPROFIT SCIENTIFIC OR EDUCATIONAL UNDER STATUTE OF STATE OF THE UNITED
STATES OF AMERICA IF LOCATED IN THE UNITED STATES OF AMERICA
(NAME OF STATE _____)
(CITATION OF STATUTE _____)

I hereby state that the nonprofit organization identified above qualifies as a nonprofit organization as defined in 37 CFR 1.9(e) for purposes of paying reduced fees to the United States Patent and Trademark Office regarding the invention described in:

the specification filed herewith with title as listed above.

the application identified above.

the patent identified above.

I hereby state that rights under contract or law have been conveyed to and remain with the nonprofit organization regarding the above identified invention. If the rights held by the nonprofit organization are not exclusive, each individual, concern, or organization having rights in the invention must file separate statements as to their status as small entities and that no rights to the invention are held by any person, other than the inventor, who would not qualify as an independent inventor under 37 CFR 1.9(c) if that person made the invention, or by any concern which would not qualify as a small business concern under 37 CFR 1.9(d) or a nonprofit organization under 37 CFR 1.9(e).

Each person, concern, or organization having any rights in the invention is listed below:

no such person, concern, or organization exists.

each such person, concern, or organization is listed below.

Norman Krause

Robert Mendicino

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b))

NAME OF PERSON SIGNING Susan BurkettTITLE IN ORGANIZATION OF PERSON SIGNING Associate ProvostADDRESS OF PERSON SIGNING Pittsburgh, PA 15213SIGNATURE Norman Krause DATE 9/13/00

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



THE UNITED STATES PATENT AND TRADEMARK OFFICE
37 C.F.R. § 3.73(b) Statement

Applicants: Krause et al.

For: COMPUTER-AIDED BONE DISTRACTION

Serial No.: 09/545,685

Filed: April 7, 2000

Carnegie Mellon University (a non-profit Pennsylvania organization) is the assignee of the entire right, title and interest in the patent identified above by virtue of either:

A. An assignment from the inventor(s) of the patent application identified above. The assignment was recorded in the United States Patent and Trademark Office on _____ at Reel____, Frame____, or for which a copy thereof is attached.

OR

B. A chain of title from the inventor(s) of the patent application identified above to the current assignee as shown below:

1. From _____ To: _____

The document was recorded in the United States Patent and Trademark Office on _____ at Reel____, Frame____, or for which a copy thereof is attached.

Copies of assignments or other documents in the chain of title are attached.

The undersigned (whose title is supplied below) is empowered to sign this statement on behalf of the assignee.

Power Of Attorney

I hereby revoke all previous powers of attorney, if any, and appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith:

Michael G. Biro	Reg. No. P-46,556	James R. Kyper,	Reg. No. 27,346
Carol I. Bordas,	Reg. No. 37,284	Michael D. Lazzara,	Reg. No. 41,142
Roberto Capriotti	Reg. No. P-46,599	Mark R. Leslie,	Reg. No. 36,360
Maria Comninou	Reg. No. 44,626	Franklin B. Molin,	Reg. No. 37,397
George D. Dickos,	Reg. No. 30,048	Robert A. Muha,	Reg. No. 44,249
Thomas J. Edgington,	Reg. No. 34,324	Donald R. Palladino	Reg. No. P-46,976
Christine R. Ethridge,	Reg. No. 30,557	Jonathan C. Parks,	Reg. No. 40,120
Jesse A. Hirshman	Reg. No. 40,016	Bernard G. Pike	Reg. No. P-46,993
James M. Joyce,	Reg. No. 43,700	Benjamin T. Queen, II	Reg. No. 41,260
Mark G. Knedeisen,	Reg. No. 42,747	David Schramm	Reg. No. 41,295
William E. Kuss,	Reg. No. 41,919	Robert D. Yeager	Reg. No. 25,047

Please Direct All Correspondence to: Jonathan C. Parks, Esquire
Kirkpatrick & Lockhart, LLP
Henry W. Oliver Building
535 Smithfield Street
Pittsburgh, PA 15222-2312

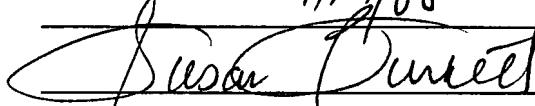
Declaration

I hereby declare that my presentation of this paper constitutes a certification under 37 C.F.R § 10.18, which provides, in part, that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and that further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful statements may jeopardize the validity of the application and any patent issuing therefrom.

Date

9/14/08

Signature



Name

Susan Burkett

Title

Associate Provost

Attorney's Docket No. 00113

PATENT

For: U.S. and/or Foreign Rights
For: U.S. Application or
 U.S. Provisional Application
For: U.S. Patent
For: PCT Application
By: Multiple Inventors

ASSIGNMENT OF INVENTION (MULTIPLE INVENTORS)

In consideration of the payment by ASSIGNEE to ASSIGNOR of the sum of One Dollar (\$1.00), the receipt of which is hereby acknowledged, and for other good and valuable consideration,

ASSIGNORS (Inventors):

Kenji Shimada
(type or print name of inventors)

Lee Weiss *L. W. E. Weiss*

Takeo Kanade 

1704 La Costa Court
Pittsburgh, PA 15237

6558 Darlington Road
Pittsburgh, PA 15217

130 Penrose Drive
Pittsburgh, PA 15208

hereby sells, assigns and transfers to

ASSIGNEE:

Carnegie Mellon University
(type or print name of ASSIGNEE)

5000 Forbes Avenue
Address

(a non-profit Pennsylvania organization)
Nationality

Pittsburgh, PA 15213

and the successors, assigns and legal representatives of the ASSIGNEE

(complete one of the following)

the entire right, title and interest

an undivided _____ percent interest for the United States and its territorial possessions

(check the following box, if foreign rights are also to be assigned)

and in all foreign countries, including all rights to claim priority, in and to any and all improvements which are disclosed in the invention entitled: **COMPUTER-AIDED BONE DISTRACTION**

(check and complete (a), (b), (c), (d), (e), (f) or (g))

and which is found in

(a) U.S. patent application executed on even date herewith

(b) U.S. patent application executed on _____

(c) U.S. provisional application naming the above inventor(s) for the above-entitled invention
 Express mail label no.: _____

Mailed: _____

To comply with 37 CFR 3.21 for recordal of this assignment, I, an ASSIGNOR signing below, hereby authorize and request my attorney to insert below the filing date and application number when they become known.

(d) U.S. application no.: 09/545,685 filed on April 7, 2000

(e) International application no. PCT / _____ /
filed on _____

(f) U.S. patent no. _____ issued _____

A change of address to which correspondence is to be sent regarding patent maintenance fees is being sent separately.

(also check (g), if foreign application(s) is also being assigned)

(g) and any legal equivalent thereof in a foreign country, including the right to claim priority and, in and to, all Letters Patent to be obtained for said invention by the above application or any continuation, division, renewal, or substitute thereof, and as to letters patent any reissue or re-examination thereof.

ASSIGNOR hereby covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment;

ASSIGNOR further covenants that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNOR and will testify as to the same in any interference, litigation or proceeding related thereto and will promptly execute and deliver to ASSIGNEE or its legal representatives any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue and enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof.

IN WITNESS WHEREOF, We have hereunto set hand and seal this

9/18/2000

Date of signing

WARNING: The date of signing must be the same as the date of execution of the application, if item (a) was checked above.

Kenji Shimada
(type name of Inventor)

Lee Weiss

Takeo Kanade

Kenji Shimada 9/18/2000
Signature of INVENTOR

Lee E. Weiss

Takeo Kanade

Notarization or Legalization Page Added.

NOTE: No witnessing, notarization or legalization is necessary. If the assignment is notarized or legalized, then it will only be prima facie evidence of execution. 35 USC 261. Use next page if notarization is desired.

Attorney Docket No. 00113

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Krause et al.

Application No.: 09/545,685

Filed: April 7, 2000

For: COMPUTER-AIDED BONE DISTRACTION



Commissioner for Patents
Washington, DC 20231

STATEMENT BY PRACTITIONER THAT APPLICATION FILED IN PTO
IS THE ONE INVENTOR EXECUTED BY SIGNING DECLARATION

NOTE: *This form is to be used when the declaration only indicates the name(s) of the inventor(s) and the title of the invention. Notice of September 12, 1983, 1035 O.G. 3.*

I,

Jonathan C. Parks

Name of Practitioner

Kirkpatrick & Lockhart LLP

P.O. Address

Henry W. Oliver Building, 535 Smithfield Street, Pittsburgh, Pennsylvania 15222-2312

Reg. No. 40,120

Tel. No. (412) 355-6288

state I am the registered practitioner for this application and the application identified above is the application that the inventor(s) executed by signing the declaration that is being submitted herewith.


SIGNATURE OF PRACTITIONER

Customer No.:

CERTIFICATE OF MAILING/TRANSMISSION (37 C.F.R. 1.8a)

I hereby certify that this correspondence is, on the date shown below, being:

MAILING

deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

FACSIMILE

transmitted by facsimile to the Patent and Trademark Office.

Date: _____

Signature

(type or print name of person certifying)

(Statement by Practitioner That Application Filed in PTO is the One Inventor Executed by Signing Declaration

[5-10])